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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,550	02/25/2002	Ralph T. Yang	UMJ-102-C (UM-1544d1)	4523
29296	7590	12/01/2003	EXAMINER	
JULIA CHURCH DIERKER DIERKER & GLASSMEYER, P.C. 3331 W. BIG BEAVER RD., SUITE 109 TROY, MI 48084-2813			JOHNSON, EDWARD M	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/082,550	YANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Edward M. Johnson	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

DETAILED ACTION

*Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Antos US 4,341,664.

Regarding claims 1 and 6-7, Antos '664 discloses a composite comprising silver acetate, chlorate, perchlorate, fluoride, nitrate, or the like (see column 12, lines 40-44) on a support having a pore diameter of 20-300 Angstroms and a surface area of 100-500 square meters per gram (see column 6, lines 65-68), for dehydrogenation of hydrocarbon compounds, which includes dehydrogenation of alkenes to alkynes.

Regarding claims 2, 4, 8, and 11-12 Antos '664 discloses silver chloride or nitrate (see column 12, lines 38-44) and silica (see column 6, lines 32-63).

Regarding claims 3, 5, and 9-10 Antos '664 discloses zeolitic aluminosilicates (see column 6, lines 44-48).

Regarding claim 13, Antos '664 discloses a pore diameter of 20-300 Angstroms.

Regarding claim 17, Antos '664 discloses propylene (see Example VI).

3. Claims 1-11 and 13-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Lampert et al. US 6,074,973.

Regarding claims 1 and 6-7, Lampert '973 discloses a hydrocarbon trap, which includes trapping of alkenes, comprising a silver compound and a palladium compound on a support (see abstract), wherein the silver compound is silver nitrate (see Example 1 and column 17, lines 32-39), the support has a 90-150 square meters per gram, and comprising pores with a diameter of 4-8 Angstroms (see claim 1 and column 5, lines 45-46).

Regarding claims 2, 4, 8, and 11-12 Lampert '973 discloses silver nitrate on silica (see Example 1) and the copper compound is claimed alternatively with the silver compound.

Regarding claims 3, 5, and 9-10 Lampert '973 discloses ZSM-5 (see Example 1).

Regarding claim 13, Lampert '973 discloses pores with a diameter of 4-8 Angstroms (see claim 1 and column 5, lines 45-46).

Regarding claims 14 and 18-19, Lampert discloses formation of  $\pi$  complexation bonds (see column 16, lines 34-36).

Regarding claim 15-16, Lampert '973 discloses 20-200 and 25 degrees Celsius, and 1 atmosphere (see column 6, lines 21-24 and Example 1).

Regarding claim 17, Lampert '973 discloses propene (see column 7, lines 6-12).

#### ***Response to Arguments***

4. Applicant's arguments filed 11/3/03 have been fully considered but they are not persuasive.

It is argued that the Examiner is directed to the Applicants' specification... supported on a carrier." This is not persuasive because Applicant does not claim a silver nitrate present in an amount more than 1%, as Applicant appears to suggest. And, in any case, Antos discloses silver acetate, chlorate, perchlorate, fluoride, nitrate, or the like with silver nitrate preferred (see column 12, lines 40-44, emphasis added). It is noted that the features upon which applicant relies (i.e., more than 1% silver nitrate) are not recited in the rejected claim(s). Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that Applicants submit that such a high temperature catalyst... alkenes from alkanes. This is not persuasive because Antos discloses propylene (see Example VI).

It is argued that in sharp contrast, the Applicants'... such alkenes. This is not persuasive because Applicant cites the specification rather than claimed subject matter. It is noted that the features upon which applicant relies (i.e., the cited specification passage) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that Applicants respectfully submit that while Antos discloses... as recited by the Applicants. This is not persuasive propylene is disclosed (see above) and because releasable retention of gaseous alkenes is an intended use of the claimed product. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the

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prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

It is argued that following the teaching of Lampert... alkenes from alkanes. This is not persuasive because Applicant appears to admit that "all" hydrocarbons are disclosed. Lampert further discloses specific alkenes, such as propene (see above). Lampert is not considered to positively "teach away" from Applicant's claim because Lambert nowhere teaches that any of applicant's claimed features should be avoided.

#### **Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action


is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ  
November 20, 2003

  
STANLEY S. SILVERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700